

# **Evaluation of the 2008 American Community Survey Employment Status Question Change\***

**Alfred O. Gottschalck, Ph.D., Braedyn K. Kromer, David J. Howard, and David Hedengren**

**Email: [alfred.o.gottschalck@census.gov](mailto:alfred.o.gottschalck@census.gov)**

**Social, Economic, and Housing Statistics Division  
U.S. Census Bureau, Washington, DC**

For the 2008 American Community Survey (ACS), changes were made to the questionnaire that modified and improved existing questions for several subject areas. In particular, an improved series of labor force questions was introduced to better capture data on employment status. Prior research and analysis of employment data from the ACS revealed that employment levels were underestimated and unemployment levels were overestimated relative to benchmark data from the Current Population Survey (CPS) or Local Area Unemployment Statistics (LAUS) program at the Bureau of Labor Statistics. The CPS and LAUS are used to produce the official estimates of employment and unemployment for the nation and states.

We provide a summary of the rationale for the question change and present the specific changes made to the series of labor force questions capturing employment status data. Second, we discuss the anticipated impact on employment status data from the questionnaire change, in addition to discussing the characteristics of those respondents answering the revised question sequence. Third, benchmark comparisons are made to both CPS and LAUS data for the years 2007, 2008, and 2009. Lastly, we present employment status data by mode of collection to examine the role changing mode proportions may have played in explaining the differences between 2007 and 2008, in addition to presenting preliminary modeling results evaluating the impact of the question change.

We believe the modifications and improvements to the ACS series of labor force questions had the effect of increasing the number of employed persons captured in the 2008 and 2009 ACS data. Given the decreased prevalence of statistical differences between ACS and CPS/LAUS employment status data for the years 2008 and 2009, we believe that the 2008 and 2009 ACS data represent an improvement in the estimates of employment and unemployment data compared to prior ACS data.

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\* This paper reports the results of research and analysis undertaken by U.S. Census Bureau staff. It has undergone a more limited review than official U.S. Census Bureau publications. This paper is released to inform interested parties of research and to encourage discussion.

## 1. Introduction

For the 2008 American Community Survey (ACS), changes were made to the questionnaire that modified and improved existing questions for several subject areas.<sup>1</sup> In particular, an improved series of labor force questions was introduced to better capture data on employment status. Prior research and analysis of employment data from the ACS and Census 2000 revealed that employment levels were underestimated and unemployment levels were overestimated relative to benchmark data from the Current Population Survey (CPS) or from the Local Area Unemployment Statistics (LAUS) program at the Bureau of Labor Statistics. The CPS and LAUS are used to produce the official estimates of employment, unemployment, and the unemployment rate for the nation and states.

This paper will detail the specifics of the question change and provide comparisons to both CPS and LAUS data for the years 2007, 2008, and 2009. We believe the modifications and improvements to the existing series of labor force questions had the effect of increasing the number of employed persons captured in the 2008 ACS data relative to CPS and LAUS estimates, and as a result, contributed to the lack of significant change in ACS unemployment rates between 2007 and 2008. We also find that 2009 ACS data are consistent with both CPS and LAUS data.

The remaining sections of this paper will be organized as follows: section two will provide details concerning the question change; section three will discuss the anticipated impact on employment status data from the questionnaire change, in addition to discussing the characteristics of those respondents answering the revised question sequence; section four will present benchmark comparisons made to both CPS and LAUS data for the years 2007, 2008, and 2009; section five will present employment status data by mode of collection to examine the role changing mode proportions may have played in explaining the differences between 2007 and 2008; section six will discuss ongoing and future work; and the last section will provide concluding remarks.

## 2. Background

In January through March of 2006, the ACS conducted the first field test of new and modified content since the ACS reached full implementation levels of data collection, hereafter referred to as the 2006 ACS Content Test. The evaluation and results of this test helped to determine the content for the 2008 ACS.

The primary objective of the 2006 ACS Content Test work on the employment status question series, specifically, the questions about worked last week, temporarily absent, and looking for work, was to improve the measurement of employment status by addressing several limitations that previous research suggested were present in the ACS question wording prior to 2008. Past research and analysis of employment data from the ACS and Census 2000 revealed that employment levels were underestimated and unemployment levels were overestimated relative to benchmark data from the CPS or LAUS program at the Bureau of Labor Statistics.<sup>2</sup>

Three of the ACS employment status questions were modified for the test panel (Person Questions 28a-28b, 34b, and 35). The worked last week (28a-28b) and temporarily absent (34b) questions are key components in the measurement of employed people and people who are not in the labor force, while the looking for work question (35) is a component in the measurement of unemployed people. These changes were done with an overall goal of better matching CPS labor force estimates by increasing the estimate of employed people, reducing the estimate of unemployed people, and reducing response inconsistencies across the individual categories of the employment status concept.

The 2006 ACS Content Test compared two versions of the employment status series question set. The control version replicated the 2006 ACS questions. The test version modified the 2006 questions by:

1. Separating the worked last week question into two parts to address irregular work arrangements,
2. Removing the reference to work for profit in the worked last week question,

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<sup>1</sup> A summary of the changes made to the 2008 ACS can be found at [http://www.census.gov/acs/www/methodology/questionnaire\\_changes/](http://www.census.gov/acs/www/methodology/questionnaire_changes/). The 2007 and 2008 ACS questionnaires are available at [http://www.census.gov/acs/www/methodology/questionnaire\\_archive/](http://www.census.gov/acs/www/methodology/questionnaire_archive/).

<sup>2</sup> For more information, see Palumbo and Siegel (2004) and Luckett-Clark, et al. (2003).

3. Including the meaning of work in the worked last week question rather than parenthetically,
4. Revising the list of examples of reasons for temporary absence to include maternity/paternity leave, family or personal reasons, and bad weather in order to reduce the estimate of unemployed people, and
5. Adding the word "actively" in all capital letters to the looking for work question.

The 2006 ACS Content Test findings showed that the test questions produced a higher estimate of employed people compared to the control. While the test questions did not produce a lower estimate of unemployed people, the overall unemployment rate was lower for the test panel.<sup>3</sup> As a result of the content test findings, the revised employment status questions were implemented in the 2008 ACS.

### 3. Characteristics of those Respondents Answering the Revised Worked Last Week Question

One of the more significant changes to the employment status sequence of questions was the change made to the question asking whether the respondent "worked last week." This question drives the determination of employment status, along with the questions pertaining to reasons for being temporarily absent from work and whether a respondent is actively looking for work if not currently working. The 2007 and 2008 versions of the employment status question sequence are shown below in Figure 1.

Findings from the above mentioned content test and other research indicated that the ACS was not completely capturing those workers with a "marginal" or "irregular" attachment to the labor force (i.e., those respondents working very few or irregular hours over the course of a week). Examples of such workers would be day laborers, on-call workers, those working temporary or irregular schedules, and those who are self-employed. To better clarify that even working one hour over a given week was considered work, the worked last week question was split into two parts (questions 28a and 28b) in the 2008 ACS where the parenthetical reference to working "as little as one hour" used in the 2007 question version was written as a separate part to the question. The intent of part (b) was to capture people who worked only a few hours or who did not have "regular" jobs.

Of particular interest are the characteristics of those who answered "no" to question 28a and "yes" to question 28b, presumably those with a marginal or irregular attachment to the labor force. Examining the characteristics of this group relative to all others is a comparison of how these two groups answered the revised question sequence when confronted with the two parts; in other words, how the two groups interpreted the question and associated "skip" instructions, and did the characteristics of those in the first group meet our a priori assumptions. For the ease of presentation and remaining discussion in this section, we will refer to this first group of respondents as "marginal workers."

Table 1 presents 2008 and 2009 ACS data by marginal worker status for selected demographic and economic characteristics. In both the 2008 and 2009 ACS, there were approximately 1.2 million people who were considered marginal workers; however, there were a number of demographic and economic differences between marginal workers and the rest of the population 16 and over that were consistent with characteristics of workers who may work temporarily or those who have constantly changing work schedules.<sup>4</sup>

For example in 2008, marginal workers were significantly more likely to be enrolled in school, with roughly 16.5 percent of marginal workers attending school within the last 3 months compared to 12.8 percent of the remaining population 16 years and over. Similar school attendance differences were seen in 2009 as well. It is not surprising that marginal workers would more likely be attending school given that they could be working temporarily or working unique hours that would allow for school attendance.

<sup>3</sup> For more information, see Holder and Raglin (2007).

<sup>4</sup> All comparisons made in this paper have undergone statistical testing and are significant at the 90 percent confidence level unless otherwise noted.

Figure 1.

2007	2008
<p><b>28</b> LAST WEEK, did this person do ANY work for either pay or profit? Mark (X) the "Yes" box even if the person worked only 1 hour, or helped without pay in a family business or farm for 15 hours or more, or was on active duty in the Armed Forces.</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No → SKIP to question 34</p>	<p><b>28</b> a. LAST WEEK, did this person work for pay at a job (or business)?</p> <p><input type="checkbox"/> Yes → SKIP to question 29</p> <p><input type="checkbox"/> No – Did not work (or retired)</p> <p>b. LAST WEEK, did this person do ANY work for pay, even for as little as one hour?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No → SKIP to question 34a</p>
<p><b>34</b> a. LAST WEEK, was this person on layoff from a job?</p> <p><input type="checkbox"/> Yes → SKIP to question 34c</p> <p><input type="checkbox"/> No</p> <p>b. LAST WEEK, was this person TEMPORARILY absent from a job or business?</p> <p><input type="checkbox"/> Yes, on vacation, temporary illness, labor dispute, etc. → SKIP to question 37</p> <p><input type="checkbox"/> No → SKIP to question 35</p> <p>c. Has this person been informed that he or she will be recalled to work within the next 6 months OR been given a date to return to work?</p> <p><input type="checkbox"/> Yes → SKIP to question 36</p> <p><input type="checkbox"/> No</p>	<p><b>34</b> a. LAST WEEK, was this person on layoff from a job?</p> <p><input type="checkbox"/> Yes → SKIP to question 34c</p> <p><input type="checkbox"/> No</p> <p>b. LAST WEEK, was this person TEMPORARILY absent from a job or business?</p> <p><input type="checkbox"/> Yes, on vacation, temporary illness, maternity leave, other family/personal reasons, bad weather, etc. → SKIP to question 37</p> <p><input type="checkbox"/> No → SKIP to question 35</p> <p>c. Has this person been informed that he or she will be recalled to work within the next 6 months OR been given a date to return to work?</p> <p><input type="checkbox"/> Yes → SKIP to question 36</p> <p><input type="checkbox"/> No</p>
<p><b>35</b> Has this person been looking for work during the last 4 weeks?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No → SKIP to question 37</p>	<p><b>35</b> During the LAST 4 WEEKS, has this person been ACTIVELY looking for work?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No → SKIP to question 37</p>
<p><b>36</b> LAST WEEK, could this person have started a job if offered one, or returned to work if recalled?</p> <p><input type="checkbox"/> Yes, could have gone to work</p> <p><input type="checkbox"/> No, because of own temporary illness</p> <p><input type="checkbox"/> No, because of all other reasons (in school, etc.)</p>	<p><b>36</b> LAST WEEK, could this person have started a job if offered one, or returned to work if recalled?</p> <p><input type="checkbox"/> Yes, could have gone to work</p> <p><input type="checkbox"/> No, because of own temporary illness</p> <p><input type="checkbox"/> No, because of all other reasons (in school, etc.)</p>

Another significant difference was related to class of worker statistics. In 2008, roughly 34.9 percent of marginal workers were self-employed (incorporated and not incorporated) compared to 7.5 percent for the remaining population 16 years and over. The 2009 data showed a similar pattern. Self-employment differences were expected given that self-employed workers are more likely to have unique work schedules or may work on temporary projects.

Similar to class of worker data, occupation statistics also differ between the two groups (not shown in Table 1 due to the large number of occupations available in ACS; available upon request). When comparing the occupations of marginal workers to the remaining population 16 and over, marginal workers were more likely to be farmers and ranchers, designers, and real estate brokers and agents, among others. Most of these occupations have characteristics that are consistent with those of marginal workers.

#### 4. Effect on Employment and Unemployment Estimates

As stated above, the Current Population Survey (CPS) and Local Area Unemployment Statistics (LAUS) are used to produce the official estimates of employment, unemployment, and the unemployment rate for the nation and states.

The following two sub-sections will present ACS employment status data compared to CPS and LAUS data for the years 2007, 2008, and 2009.

One notable difference between the ACS and CPS survey universes (and therefore indirectly for LAUS data given CPS data serves as one input for these data) relates to the group quarters (GQ) population. The ACS includes both institutionalized (e.g., prisons, residential treatment centers, and nursing facilities) and noninstitutionalized (e.g., college/university housing and military quarters) GQ in its survey universe, while the CPS includes only noninstitutionalized GQ. This survey sample difference affects total population counts and, likewise, employment-population ratio comparisons. However, it does not impact employment and unemployment estimates since those in the institutionalized GQ population are not considered part of the labor force. Furthermore, for comparison purposes, all individuals living in institutionalized group quarters are excluded from the ACS estimates, and as a result, ACS estimates presented in this paper may not match published ACS data on American FactFinder.

Lastly, given the ACS employment status question sequence change occurred between the 2007 and 2008 surveys, the below discussion will primarily focus on differences between these two years. Where there are differences in the substantive findings of the 2009 data comparisons from those found in the 2008 data comparisons, these will be highlighted; otherwise, only a statement of consistency will be made for the 2009 data comparisons.

#### **4.1 Comparison to Current Population Survey (CPS) Data**

Tables 2 through 4 present 2007, 2008, and 2009 employment status data from the ACS and CPS, including the total working-age population, the civilian labor force, the number of employed and unemployed persons, the unemployment rate, and the number of people not in the labor force.<sup>5</sup>

The ACS estimate of civilian noninstitutionalized employment was approximately 3.5 million lower than the CPS estimate in 2007. In 2008, after the question changes, the ACS civilian noninstitutionalized employment count was higher than the CPS by roughly 665,000 persons. The 2009 estimates followed a similar pattern, with the ACS civilian noninstitutionalized employment count being roughly 725,000 higher than the CPS estimate.

The difference between the ACS and CPS employment/population ratios, similar to employment counts, changed after the 2008 ACS question changes.<sup>6</sup> In 2007, the ACS employment/population ratio was 61.6 percent, approximately 1.4 percentage points lower than the CPS estimate of 63.0 percent. In both 2008 and 2009, the ACS employment/population ratio was 0.4 percentage points higher than the CPS estimate.

Consistent with the employment comparisons discussed above, ACS unemployment rate estimates tended to be significantly higher than CPS estimates in 2007.<sup>7</sup> The ACS unemployment rate estimate of 6.3 percent in 2007 was 1.7 percentage points higher than the CPS estimate of 4.6 percent. The unemployment rate gap between the two surveys narrowed considerably after the ACS question changes; in both 2008 and 2009, the ACS unemployment rate estimate was 0.6 percentage points higher than the CPS estimate.

Table 5 shows that, similar to the nation as a whole, ACS unemployment rate estimates for the 50 states and the District of Columbia were higher than CPS estimates in 2007.<sup>8</sup> The majority of states (47 out of 50 states) and the District of Columbia reported statistically different unemployment rate estimates in the ACS than in the CPS in 2007. As with the national estimates, the ACS question changes improved consistency between the two surveys

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<sup>5</sup> Please see Kromer and Howard (2011) for more detailed information concerning differences in survey methodology between ACS and CPS, including sample, reference period, and question differences. It is important to note that while both surveys collect data on a monthly basis, ACS data are reported annually while CPS data are reported monthly. To address this disparity, CPS estimates presented in this note (i.e., the total U.S. estimates) are based on an average of the monthly employment status data across the 12 months of 2007, 2008, and 2009.

<sup>6</sup> The employment/population ratio is the percentage of all working-age civilians who are employed.

<sup>7</sup> The labor force is the sum of employed and unemployed persons. The unemployment rate is the number of unemployed persons divided by the labor force.

<sup>8</sup> Official BLS state estimates are provided via the LAUS program. CPS state estimates are provided in this section for completeness; hence, state estimate differences and comparisons are discussed in more detail in Section 4.2 where LAUS data is presented.

across states. In 2008 (see Table 6), only 24 out of 50 states reported statistically different unemployment rates in the ACS than in the CPS. State level unemployment rates in 2009 saw a comparable pattern (see Table 7), with 21 states reporting statistically higher unemployment rates in the ACS versus the CPS.

#### **4.2 Comparison to Local Area Unemployment Statistics (LAUS) Data**

Tables 8, 9, and 10 present ACS and CPS/LAUS employment-population ratios for the U.S. civilian noninstitutionalized population by state for 2007, 2008, and 2009.<sup>9</sup> In 2007, the ACS and CPS U.S. employment-population ratios were 61.6 and 63.0, respectively. Between 2007 and 2008, the ACS U.S. employment-population ratio increased from 61.6 to 62.7, while for the CPS, the U.S. employment-population ratio decreased 0.8 percentage points, from 63.0 to 62.2. Between 2008 and 2009, both the ACS and CPS experienced decreases in the U.S. employment-population ratio of about 3.0 percentage points. The difference between the ACS and CPS U.S. employment-population ratios was 1.3 percentage points in 2007, and about 0.5 percentage points in both 2008 and 2009.

For the ACS between 2007 and 2008, 13 states experienced no significant change in their employment-population ratio, while 37 states and the District of Columbia experienced an increase and no states experienced a decrease in their employment-population ratio. For the LAUS between 2007 and 2008, 40 states and the District of Columbia experienced no significant change in their employment-population ratio, while no state experienced an increase and 10 states experienced a decrease in their employment-population ratio. Between 2008 and 2009, 47 states and the District of Columbia experienced a decrease in their ACS employment-population ratio and three states experienced no change in their ACS employment-population ratio, while 32 states and the District of Columbia experienced a decrease in their LAUS employment-population ratio and 18 states experienced no change in their LAUS employment-population ratio. Twenty-eight states and the District of Columbia had ACS and LAUS employment-population ratios that were statistically different from each other in 2007, while the number of statistically different states decreased to 11 in 2008 and 12 in 2009.

Tables 11, 12, and 13 present ACS and CPS/LAUS unemployment rates for the U.S. civilian noninstitutionalized population by state for 2007, 2008, and 2009.<sup>10</sup> In 2007, the ACS and CPS U.S. unemployment rates were 6.3 percent and 4.6 percent, respectively. Between 2007 and 2008, the ACS U.S. unemployment rate increased 0.1 percentage points, from 6.3 percent to 6.4 percent, while for the CPS, the U.S. unemployment rate increased 1.2 percentage points, from 4.6 percent to 5.8 percent. Between 2008 and 2009, both the ACS and CPS experienced a 3.5 percentage point increase in the U.S. unemployment rate. The difference between the ACS and CPS U.S. unemployment rates was 1.7 percentage points in 2007 and 0.6 percentage points in 2008 and 2009.

For the ACS between 2007 and 2008, 32 states and the District of Columbia had no statistically significant change in their unemployment rate, while six states (California, Delaware, Florida, Nevada, Rhode Island, and South Carolina) experienced an increase and twelve states experienced a decrease in their unemployment rate. For the LAUS between 2007 and 2008, 15 states experienced no significant change in their unemployment rate, while 35 states and the District of Columbia experienced an increase and no states experienced a decrease. Between 2008 and 2009, 49 states and the District of Columbia experienced an increase in their ACS unemployment rate and one state (North Dakota) experienced no change in their ACS unemployment rate, while 49 states and the District of Columbia experienced an increase in their LAUS unemployment rate and one state (Alaska) experienced no change in their LAUS unemployment rate. Forty-nine states and the District of Columbia had ACS and LAUS unemployment rates that were statistically different from each other in 2007, while the number of statistically different states decreased to 26 in 2008 and 20 in 2009.

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<sup>9</sup> Estimates for the nation are obtained from the CPS while estimates by state are obtained from the LAUS program. The 2007, 2008, and 2009 LAUS estimates are obtained from published Bureau of Labor Statistics data that can be found at <http://www.bls.gov/lau/>.

<sup>10</sup> Estimates for the nation are obtained from the CPS while estimates by state are obtained from the LAUS program. The 2007, 2008, and 2009 LAUS estimates are obtained from published Bureau of Labor Statistics data that can be found at <http://www.bls.gov/lau/>.

## 5. ACS Employment Status Data by Mode of Collection

The ACS is administered via three modes of collection: 1) Mail questionnaire; 2) Computer-assisted telephone interview (CATI); and 3) Computer-assisted personal interview (CAPI). The proportions of the data obtained from each of the three modes have significant and consistent relationships. At the national level, the mail proportion is generally the highest (typically ranging from 50 to 55 percent), followed by CAPI (30 to 40 percent), and CATI (10 to 15 percent). There was a significant increase in the mail proportion (51.1 percent to 53.3 percent) from 2007 to 2008 and a significant decrease in the CATI proportion (12.0 percent to 10.1 percent) during this time period. This decrease in the CATI proportion is likely due to the suspension of Failed-edit Follow-up (FEFU) operations from April to August of 2008, rather than a fundamental change brought about by the question change in 2008.

There exist patterns between the unemployment rates for the three modes of collection.<sup>11</sup> In general, the mail questionnaires have lower-than-average unemployment rates, whereas the other two modes have higher-than-average unemployment rates. The unemployment rates for the mail questionnaires are the lowest of the three modes, with CATI and CAPI being similar. These relationships exist on the national, state, and county levels. In addition, the significant differences between the modes' unemployment rates tend to be consistent from year to year, meaning that a state with a significant difference one year is likely to have a similar significant difference the next year. This consistency exists on the county level as well. These relationships did not change from 2007 to 2008, implying that the question change did not have a significant impact on this aspect of the data.

There was a large increase in the number of states that had a significant decrease in their mail unemployment rates from 2007 to 2008. While this is notable because it seems incongruous with known changes in the labor market over this time period (a period of increasing unemployment), it is likely explained by the questionnaire change that resulted in more marginal workers being captured (and thus a lower unemployment rate), as discussed above.

In order to test the hypothesis that the changing mode proportions did not drive the observed changes in the state-level unemployment rates from 2007 to 2008, a synthetic state-level unemployment rate was constructed for 2008 assuming that the mode proportions from 2007 did not change in 2008 (the 2008 mode unemployment rates for each state were still used in the calculation of these synthetic 2008 unemployment rates, as they were the "true" changes in the unemployment rates and underlying labor market conditions). For 2008, New Hampshire and Washington had significant decreases in their real (observed) unemployment rates that ceased to be significant when the 2007 mode proportions were used in the synthetic 2008 unemployment rates. The unemployment rate changes for the 48 other states and the District of Columbia were unaffected (in a statistically significant way) by this base-weight analysis, implying that the significant changes in mode proportions from 2007 to 2008 did not drive the vast majority of changes (or non-changes) in the overall state-level unemployment rates. Moreover, when this analysis was performed to calculate synthetic unemployment rates in other years (using the previous year's mode proportions), there were generally a few states each year whose unemployment rate changes went from either statistically significant to not statistically significant, or vice versa. This provides further evidence that changing mode proportions did not drive changes in the unemployment rates.

## 6. Work in Progress and Future Research

Currently, we are in the process of constructing a modeling methodology to bridge the 2007 and 2008 ACS data years to aid users in performing time series analyses. Our first goal of this methodology is to assess the impact of the question change on the measured unemployment rates using a difference in difference analysis between ACS and CPS with the question change as the treatment. On a restricted sample, we regress a respondent's unemployment status (1 for unemployed and 0 for employed) on the full interaction of a dummy variable for ACS respondents and a dummy variable for all (CPS or ACS) respondents post-2008.<sup>12</sup> The interaction of the dummy variables show the effect of the question change. We preliminarily find that the question change reduced the rate of unemployment by about three-quarters of a percent.

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<sup>11</sup> The mode results presented here are not part of or derived from an official, full mode study covering the entire ACS survey. ACS has not been able to secure funding for a full mode study; in the absence of this official study, we present our findings based on author's tabulations.

<sup>12</sup> The sample is restricted to those in the labor force (i.e., those employed or unemployed) and age 25 to 60.

Of course it is unlikely that the question change affected all groups equally so we also assessed the impact of the question change on a variety of subgroups. By adding a dummy variable for a respondent's Hispanic origin, we estimated that their unemployment rate was reduced by about two full percentage points (relative to the 0.5 percentage point decrease for non-Hispanics). A large, but not unexpected, result given how the question change was designed to capture more marginal workers, many of which tend to be Hispanic (as presented in Table 1 above). We also added dummy variables for six racial categories but found no statistically significant differences in response to the question change. Likewise, we found no statistically significant differences between census regions or divisions. Lastly, we have begun investigating the potential impact of the question change across educational attainment categories and by state.

Also, work involving the linking of ACS data to administrative employment and unemployment data will begin in the coming year. This ACS/administrative data job frame will allow for a further evaluation of respondents who classify themselves as marginal workers in regard to type of job held, earnings, and hours worked.

## 7. Conclusion

The changes to the employment status series of questions in the 2008 ACS will make ACS labor force data more consistent with benchmark data from the CPS and the LAUS program. The CPS and LAUS are used to produce the official estimates of employment, unemployment, and the unemployment rate for the nation and states. We believe the modifications and improvements to the existing series of labor force questions had the effect of increasing the number of employed persons captured in the 2008 ACS data relative to CPS and LAUS estimates, and as a result, contributed to the lack of significant change in ACS unemployment rates between 2007 and 2008. Users should use caution in making comparisons between 2008 and earlier years.

Even though the 2008 ACS data did not capture as many significant increases in state unemployment rates between 2007 and 2008 as the LAUS data, the 2008 ACS did capture an increase in unemployment rates for those states (California, Florida, and Nevada) most affected by the economic slowdown that occurred over the course of 2008.<sup>13</sup> Given this and the decreased prevalence of statistical differences between ACS and CPS/LAUS employment-population ratio and unemployment rate estimates, we believe that the 2008 ACS data (and subsequent years) represent an improvement in the estimates of employment and unemployment data compared to prior ACS data.

Furthermore, given the demographic and economic differences identified between the marginal and non-marginal populations were consistent with characteristics of workers who work temporarily or have a marginal attachment to the labor market, we feel the revised "worked last week" question captured those additional workers potentially not identified in the past. Also, we found no evidence that the mode of collection played a role in the changes in ACS employment status data between 2007 and 2008. Lastly, given similar patterns were found in the 2009 ACS data when compared to CPS and LAUS data as were found in the 2008 ACS data, we feel the revised set of employment status questions are functioning in a consistent manner.

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<sup>13</sup> The Business Cycle Dating Committee of the National Bureau of Economic Research (NBER) maintains a chronology of the beginning and ending dates (months and quarters) of U.S. recessions. The NBER was founded in 1920, and published its first business cycle dates in 1929. Please see <http://www.nber.org/cycles/dec2008.html> for more information concerning the dating of the most recent U.S. recession.



## 8. References

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Table 1. Marginal Worker Status by Select Demographic and Economic Characteristics, 2008 and 2009  
(Civilian noninstitutional population; percent)

	2008				2009			
	Marginal Worker	Margin of Error <sup>1</sup>	Balance of Pop 16+	Margin of Error <sup>1</sup>	Marginal Worker	Margin of Error <sup>1</sup>	Balance of Pop 16+	Margin of Error <sup>1</sup>
Total	1,161,768	18,717	217,900,876	74,372	1,195,091	18,626	222,279,013	59,342
Age	Marginal Worker	Margin of Error <sup>1</sup>	Balance of Pop 16+	Margin of Error <sup>1</sup>	Marginal Worker	Margin of Error <sup>1</sup>	Balance of Pop 16+	Margin of Error <sup>1</sup>
16 to 19	9.6%	0.44	6.8%	0.02	8.6%	0.35	6.7%	0.02
20 to 24	10.4%	0.49	8.5%	0.02	10.5%	0.55	8.5%	0.02
25 to 44	34.9%	0.69	35.8%	0.02	34.7%	0.64	35.3%	0.02
45 to 54	17.6%	0.63	19.2%	0.02	18.2%	0.45	19.0%	0.02
55 to 64	14.8%	0.39	14.5%	0.01	14.6%	0.45	14.8%	0.01
65+	12.7%	0.45	15.3%	0.01	13.4%	0.45	15.8%	0.02
Total	100.0%		100.0%		100.0%		100.0%	
Sex	Marginal Worker	Margin of Error	Balance of Pop 16+	Margin of Error	Marginal Worker	Margin of Error	Balance of Pop 16+	Margin of Error
Male	50.9%	0.83	48.5%	0.02	53.8%	0.71	48.4%	0.02
Female	49.1%	0.83	51.5%	0.02	46.2%	0.71	51.6%	0.02
Total	100.0%		100.0%		100.0%		100.0%	
Race	Marginal Worker	Margin of Error	Balance of Pop 16+	Margin of Error	Marginal Worker	Margin of Error	Balance of Pop 16+	Margin of Error
White	77.5%	0.64	78.0%	0.04	77.5%	0.60	77.8%	0.04
Black	12.2%	0.45	11.5%	0.02	12.4%	0.56	11.7%	0.02
American Indian/Alaska	1.3%	0.19	1.1%	0.01	1.6%	0.19	1.1%	0.01
Asian	3.7%	0.30	4.7%	0.01	3.3%	0.26	4.8%	0.01
Native Hawaiian/Pac. Isl.	0.3%	0.12	0.2%	0.00	0.1%	0.05	0.2%	0.00
Other race	5.0%	0.41	4.6%	0.03	5.1%	0.37	4.5%	0.04
Total	100.0%		100.0%		100.0%		100.0%	
Hispanic	Marginal Worker	Margin of Error	Balance of Pop 16+	Margin of Error	Marginal Worker	Margin of Error	Balance of Pop 16+	Margin of Error
Yes	14.8%	0.57	13.6%	0.02	15.3%	0.58	13.8%	0.01
No	85.2%	0.57	86.4%	0.02	84.7%	0.58	86.2%	0.01
Total	100.0%		100.0%		100.0%		100.0%	
Citizenship	Marginal Worker	Margin of Error	Balance of Pop 16+	Margin of Error	Marginal Worker	Margin of Error	Balance of Pop 16+	Margin of Error
Born in US	82.5%	0.66	83.5%	0.05	82.6%	0.66	83.3%	0.05
Born in Puerto Rico	0.4%	0.11	0.6%	0.01	0.4%	0.10	0.6%	0.01
Born Abroad to US parents	0.9%	0.14	0.8%	0.01	0.9%	0.16	0.8%	0.01
Naturalized	6.1%	0.42	6.7%	0.03	5.9%	0.37	6.9%	0.03
Not a citizen	10.0%	0.52	8.4%	0.05	10.1%	0.55	8.4%	0.05
Total	100.0%		100.0%		100.0%		100.0%	
Speaks another language beside English at home	Marginal Worker	Margin of Error	Balance of Pop 16+	Margin of Error	Marginal Worker	Margin of Error	Balance of Pop 16+	Margin of Error
Yes	21.2%	0.69	19.5%	0.05	21.4%	0.66	19.8%	0.05
No, only English	78.8%	0.69	80.5%	0.05	78.6%	0.66	80.2%	0.05
Total	100.0%		100.0%		100.0%		100.0%	
Class of Worker	Marginal Worker	Margin of Error	Balance of Pop 16+	Margin of Error	Marginal Worker	Margin of Error	Balance of Pop 16+	Margin of Error
Private for-profit	46.2%	0.66	52.8%	0.06	44.3%	0.69	51.9%	0.07
Private not-for-profit	6.9%	0.35	5.7%	0.03	7.8%	0.35	5.8%	0.03
Local government	4.7%	0.27	5.9%	0.03	5.0%	0.26	5.7%	0.03
State government	2.5%	0.23	3.2%	0.02	2.9%	0.24	3.3%	0.02
Federal government	1.3%	0.18	2.3%	0.02	1.3%	0.19	2.3%	0.02
Self-employed not incorp	29.3%	0.68	4.9%	0.03	32.1%	0.63	4.9%	0.02
Self-employed incorporated	5.6%	0.32	2.6%	0.02	5.3%	0.33	2.5%	0.02
Unpaid family workers	1.9%	0.20	0.2%	0.00	1.4%	0.16	0.2%	0.00
Unemployed	0.0%	0.02	0.6%	0.01	0.0%	0.00	0.8%	0.01
Total <sup>2</sup>	98.4%		78.1%		100.0%		77.2%	
School Enrollment	Marginal Worker	Margin of Error	Balance of Pop 16+	Margin of Error	Marginal Worker	Margin of Error	Balance of Pop 16+	Margin of Error
No, has not attended	83.5%	0.58	87.2%	0.03	83.4%	0.55	86.9%	0.03
Yes, public	13.1%	0.50	10.4%	0.03	13.0%	0.51	10.6%	0.03
Yes, private	3.4%	0.28	2.4%	0.02	3.6%	0.28	2.5%	0.02
Total	100.0%		100.0%		100.0%		100.0%	

<sup>1</sup> Data are based on a sample and are subject to sampling variability. This figure when added to and subtracted from the estimate provides the 90-percent confidence interval.

<sup>2</sup> These percentages do not add to 100 percent because we do not restrict the class of worker variable presented in this table to employed persons only. Therefore, there is a percentage of non-marginal and marginal respondents who do not have reported class of worker information because they may be unemployed or not in the labor force.

Table 2.  
Employment Status from the American Community Survey and the Current Population Survey: 2007

(Numbers in thousands.)

Characteristic	2007 ACS		2007 CPS		Difference <sup>2</sup>
	Estimate	Margin of error <sup>1</sup>	Estimate	Margin of error <sup>1</sup>	
<b>Population 16 years and over<sup>3</sup></b>	236,417	47	(x)	(x)	(x)
Civilian noninstitutional population	231,321	49	231,867	(x)	-546
In labor force	153,213	115	(x)	(x)	(x)
Civilian labor force	152,211	113	153,124	304	-913 *
Employed	142,588	110	146,047	329	-3,459 *
Unemployed	9,623	49	7,078	105	2,545 *
Not in civilian labor force	79,109	112	78,743	326	366 *
Armed forces	1,001	16	(x)	(x)	(x)
Not in labor force	83,204	111	(x)	(x)	(x)
Employment/total population ratio <sup>4</sup>	60.3	0.1	(x)	(x)	(x)
Employment/civilian noninstitutional population ratio <sup>5</sup>	61.6	0.1	63.0	0.2	-1.4 *
Unemployment rate <sup>6</sup>	6.3	0.1	4.6	0.1	1.7 *

\* Statistically significant difference at the 90-percent confidence level.

(X) Not applicable.

1. This figure when added to and subtracted from the estimate provides the 90-percent confidence interval.
2. For the numbers, the difference is the percent difference and is calculated as  $\{(ACS-CPS)/CPS\} \times 100$ . For the percentages, the difference is the percentage-point difference and is calculated as  $ACS-CPS$ . All calculations and tests of significance are done on unrounded estimates and standard errors.
3. The universe for the Current Population Survey is the civilian non-institutional population. Estimates for the total population are not available from the CPS.
4. Calculated as the employed population divided by the total population 16 and over.
5. Calculated as the employed population divided by the civilian noninstitutional population.
6. Calculated as the unemployed population divided by the civilian labor force population.

Source: 2007 ACS data and 2007 CPS annual average. For more information on the ACS and CPS, see <http://www.census.gov/acs/www/> and <http://www.bls.gov/cps/>.

Table 3.  
Employment Status from the American Community Survey and the Current Population Survey: 2008

(Numbers in thousands.)

Characteristic	2008 ACS		2008 CPS		Difference <sup>2</sup>
	Estimate	Margin of error <sup>1</sup>	Estimate	Margin of error <sup>1</sup>	
<b>Population 16 years and over<sup>3</sup></b>	238,762	41	(x)	(x)	(x)
Civilian noninstitutional population	233,375	43	233,788	(x)	-413
In labor force	157,193	133	(x)	(x)	(x)
Civilian labor force	155,950	131	154,287	299	1,663 *
Employed	146,027	142	145,362	331	665 *
Unemployed	9,923	57	8,924	117	999 *
Not in civilian labor force	77,425	118	79,501	327	-2,076 *
Armed forces	1,243	20	(x)	(x)	(x)
Not in labor force	81,569	118	(x)	(x)	(x)
Employment/total population ratio <sup>4</sup>	61.2	0.1	(x)	(x)	(x)
Employment/civilian noninstitutional population ratio <sup>5</sup>	62.6	0.1	62.2	0.2	0.4 *
Unemployment rate <sup>6</sup>	6.4	0.1	5.8	0.1	0.6 *

\* Statistically significant difference at the 90-percent confidence level.

(X) Not applicable.

1. This figure when added to and subtracted from the estimate provides the 90-percent confidence interval.

2. For the numbers, the difference is the percent difference and is calculated as  $\{(ACS-CPS)/CPS\} \times 100$ . For the percentages, the difference is the percentage-point difference and is calculated as  $ACS-CPS$ . All calculations and tests of significance are done on unrounded estimates and standard errors.

3. The universe for the Current Population Survey is the civilian non-institutional population. Estimates for the total population are not available from the CPS.

4. Calculated as the employed population divided by the total population 16 and over.

5. Calculated as the employed population divided by the civilian noninstitutional population.

6. Calculated as the unemployed population divided by the civilian labor force population.

Source: 2008 ACS data and 2008 CPS annual average. For more information on the ACS and CPS, see <http://www.census.gov/acs/www/> and <http://www.bls.gov/cps/>.

Table 4.

Employment Status from the American Community Survey and the Current Population Survey: 2009

(Numbers in thousands.)

Characteristic	2009 ACS		2009 CPS		Difference <sup>2</sup>
	Estimate	Margin of error <sup>1</sup>	Estimate	Margin of error <sup>1</sup>	
<b>Population 16 years and over<sup>3</sup></b>	241,002	42	(x)	(x)	(x)
Civilian noninstitutional population	235,546	44	235,801	(x)	-255
In labor force	157,335	128	(x)	(x)	(x)
Civilian labor force	156,044	127	154,142	299	1,902 *
Employed	140,602	137	139,877	347	725 *
Unemployed	15,442	65	14,265	146	1,177 *
Not in civilian labor force	79,502	118	81,659	200	-2,157 *
Armed forces	1,291	23	(x)	(x)	(x)
Not in labor force	83,667	118	(x)	(x)	(x)
Employment/total population ratio <sup>4</sup>	58.3	0.1	(x)	(x)	(x)
Employment/civilian noninstitutional population ratio <sup>5</sup>	59.7	0.1	59.3	0.2	0.4 *
Unemployment rate <sup>6</sup>	9.9	0.1	9.3	0.1	0.6 *

\* Statistically significant difference at the 90-percent confidence level.

(X) Not applicable.

1. This figure when added to and subtracted from the estimate provides the 90-percent confidence interval.

2. For the numbers, the difference is the percent difference and is calculated as  $\{(ACS-CPS)/CPS\} \times 100$ . For the percentages, the difference is the percentage-point difference and is calculated as  $ACS-CPS$ . All calculations and tests of significance are done on unrounded estimates and standard errors.

3. The universe for the Current Population Survey is the civilian non-institutional population. Estimates for the total population are not available from the CPS.

4. Calculated as the employed population divided by the total population 16 and over.

5. Calculated as the employed population divided by the civilian noninstitutional population.

6. Calculated as the unemployed population divided by the civilian labor force population.

Source: 2009 ACS data and 2009 CPS annual averages. For more information on the ACS and CPS, see <http://www.census.gov/acs/www/> and <http://www.bls.gov/cps/>.

**Table 5. Comparison between the American Community Survey (ACS) and the Current Population Survey (CPS) Estimates of Unemployment Rates by State: 2007**

(Civilian non-institutional population)

State	2007 ACS Estimate		2007 CPS Estimate		Percentage-point difference
	Unemployment Rate	Margin of error <sup>1</sup>	Unemployment Rate	Margin of error <sup>1</sup>	
<b>United States</b>	<b>6.3</b>	<b>0.1</b>	<b>4.6</b>	<b>0.1</b>	<b>1.7 *</b>
Alabama	6.7	0.3	4.0	0.5	2.7 *
Alaska	8.8	0.7	6.2	1.6	2.6 *
Arizona	5.8	0.3	3.9	0.4	1.9 *
Arkansas	7.2	0.4	5.6	0.8	1.6 *
California	6.6	0.1	5.3	0.2	1.3 *
Colorado	5.5	0.2	3.7	0.5	1.8 *
Connecticut	6.0	0.3	4.5	0.6	1.5 *
Delaware	5.6	0.6	3.5	1.1	2.1 *
District of Columbia	8.1	0.9	5.5	1.6	2.6 *
Florida	6.2	0.2	4.1	0.3	2.1 *
Georgia	7.0	0.2	4.3	0.4	2.7 *
Hawaii	4.5	0.4	2.9	0.8	1.7 *
Idaho	5.1	0.4	3.0	0.8	2.1 *
Illinois	7.2	0.2	5.1	0.3	2.1 *
Indiana	6.6	0.2	4.6	0.5	2.0 *
Iowa	4.8	0.3	3.7	0.6	1.1 *
Kansas	5.1	0.3	4.1	0.6	1.0 *
Kentucky	6.6	0.3	5.4	0.6	1.2 *
Louisiana	6.4	0.3	4.3	0.6	2.2 *
Maine	6.0	0.5	4.7	1.0	1.3 *
Maryland	5.5	0.2	3.6	0.4	1.9 *
Massachusetts	6.1	0.3	4.6	0.5	1.5 *
Michigan	9.6	0.2	7.1	0.5	2.6 *
Minnesota	5.4	0.2	4.6	0.5	0.8 *
Mississippi	9.3	0.4	6.1	0.8	3.1 *
Missouri	6.3	0.2	5.0	0.5	1.3 *
Montana	5.2	0.6	3.6	1.0	1.6 *
Nebraska	4.6	0.3	3.1	0.7	1.5 *
Nevada	5.6	0.4	4.6	0.7	1.0 *
New Hampshire	5.1	0.5	3.6	0.9	1.5 *
New Jersey	5.9	0.2	4.2	0.4	1.7 *
New Mexico	5.6	0.5	3.7	0.8	2.0 *
New York	6.2	0.1	4.6	0.3	1.6 *
North Carolina	6.9	0.2	4.5	0.4	2.3 *
North Dakota	3.5	0.5	3.2	1.2	0.3
Ohio	7.2	0.2	5.6	0.4	1.6 *
Oklahoma	5.4	0.2	4.4	0.6	0.9 *
Oregon	6.5	0.3	5.2	0.6	1.4 *
Pennsylvania	5.9	0.1	4.3	0.3	1.6 *
Rhode Island	6.3	0.7	4.9	1.1	1.4 *
South Carolina	6.9	0.3	5.6	0.6	1.2 *
South Dakota	4.1	0.5	2.9	1.0	1.2 *
Tennessee	6.9	0.2	4.6	0.5	2.4 *
Texas	5.9	0.1	4.3	0.2	1.6 *
Utah	3.8	0.3	2.6	0.6	1.2 *
Vermont	5.1	0.5	4.0	1.3	1.1
Virginia	4.8	0.2	3.1	0.3	1.8 *
Washington	6.0	0.3	4.6	0.5	1.4 *
West Virginia	6.2	0.5	4.6	0.9	1.6 *
Wisconsin	5.7	0.2	5.0	0.5	0.7 *
Wyoming	3.7	0.5	2.9	1.3	0.8

\* Statistically significant difference at the 90-percent confidence level.

1. This number added to and subtracted from the estimate yields the 90-percent confidence interval around the estimate.

Source: U.S. Census Bureau, American Community Survey, 2007 and Current Population Survey, 2007, annual average.

Table derived from special tabulations. For more information on the ACS and CPS, see <http://www.census.gov/acs> and <http://www.bls.gov/cps>

**Table 6. Comparison between the American Community Survey (ACS) and the Current Population Survey (CPS) Estimates of Unemployment Rates by State: 2008**

(Civilian non-institutional population)

State	2008 ACS Estimate		2008 CPS Estimate		Percentage-point difference
	Unemployment Rate	Margin of error <sup>1</sup>	Unemployment Rate	Margin of error <sup>1</sup>	
<b>United States</b>	<b>6.4</b>	<b>0.1</b>	<b>5.8</b>	0.1	<b>0.6 *</b>
Alabama	6.9	0.3	5.6	0.6	1.3 *
Alaska	7.8	0.7	6.8	1.7	1.0
Arizona	6.1	0.3	5.9	0.5	0.2
Arkansas	6.7	0.4	5.2	0.8	1.5 *
California	7.5	0.1	7.1	0.2	0.3 *
Colorado	4.9	0.2	4.8	0.5	0.1
Connecticut	6.4	0.3	5.7	0.7	0.6
Delaware	6.6	0.7	5.0	1.3	1.7 *
District of Columbia	7.8	0.9	6.6	1.7	1.2
Florida	7.5	0.2	6.1	0.3	1.4 *
Georgia	7.0	0.3	6.4	0.4	0.6 *
Hawaii	4.0	0.4	4.2	1.0	-0.2
Idaho	5.5	0.4	5.4	1.0	0.0
Illinois	6.9	0.2	6.6	0.4	0.3
Indiana	6.9	0.2	6.0	0.5	0.9 *
Iowa	3.9	0.2	4.0	0.6	-0.1
Kansas	4.5	0.3	4.5	0.7	0.0
Kentucky	6.8	0.3	6.3	0.7	0.5
Louisiana	6.1	0.3	5.0	0.6	1.1 *
Maine	5.9	0.4	5.4	1.1	0.5
Maryland	5.3	0.2	4.2	0.5	1.1 *
Massachusetts	6.0	0.3	5.3	0.5	0.6 *
Michigan	9.5	0.2	8.3	0.5	1.2 *
Minnesota	4.8	0.2	5.5	0.5	-0.7 *
Mississippi	7.6	0.4	6.5	0.9	1.1 *
Missouri	6.1	0.3	6.1	0.6	0.0
Montana	4.7	0.5	5.2	1.2	-0.4
Nebraska	4.0	0.3	3.3	0.7	0.7
Nevada	7.3	0.4	6.1	0.8	1.2 *
New Hampshire	4.4	0.4	3.8	0.9	0.6
New Jersey	5.9	0.2	5.4	0.4	0.5 *
New Mexico	6.0	0.4	4.4	0.8	1.6 *
New York	6.3	0.1	5.5	0.3	0.8 *
North Carolina	6.7	0.2	6.4	0.5	0.4
North Dakota	3.2	0.4	3.2	1.2	0.0
Ohio	7.0	0.2	6.5	0.4	0.5 *
Oklahoma	4.6	0.3	3.7	0.6	0.9 *
Oregon	6.7	0.3	6.4	0.7	0.2
Pennsylvania	5.7	0.2	5.3	0.4	0.4 *
Rhode Island	7.5	0.7	7.9	1.4	-0.5
South Carolina	7.7	0.3	6.7	0.7	1.1 *
South Dakota	3.7	0.5	3.0	1.0	0.6
Tennessee	6.9	0.2	6.6	0.6	0.3
Texas	5.2	0.1	4.8	0.3	0.4 *
Utah	4.0	0.3	3.5	0.6	0.5
Vermont	5.0	0.5	4.9	1.5	0.0
Virginia	4.9	0.2	4.0	0.4	0.9 *
Washington	5.6	0.2	5.3	0.5	0.3
West Virginia	5.7	0.4	4.4	0.9	1.3 *
Wisconsin	5.1	0.2	4.7	0.5	0.4
Wyoming	3.3	0.6	2.9	1.3	0.4

\* Statistically significant difference at the 90-percent confidence level.

1. This number added to and subtracted from the estimate yields the 90-percent confidence interval around the estimate.

Source: U.S. Census Bureau, American Community Survey, 2008 and Current Population Survey, 2008, annual average.

Table derived from special tabulations. For more information on the ACS and CPS, see <http://www.census.gov/acs> and <http://www.bls.gov/cps>

**Table 7. Comparison between the American Community Survey (ACS) and the Current Population Survey (CPS) Estimates of Unemployment Rates by State: 2009**

(Civilian non-institutional population)

State	2009 ACS Estimate		2009 CPS Estimate		Percentage-point difference
	Unemployment Rate	Margin of error <sup>1</sup>	Unemployment Rate	Margin of error <sup>1</sup>	
<b>United States</b>	<b>9.9</b>	<b>0.1</b>	<b>9.3</b>	<b>0.1</b>	<b>0.6 *</b>
Alabama	11.1	0.4	11.2	0.9	-0.1
Alaska	9.5	0.8	7.9	1.8	1.5
Arizona	10.6	0.3	10.0	0.7	0.6
Arkansas	9.1	0.5	7.8	0.9	1.3 *
California	11.3	0.1	11.3	0.3	0.0
Colorado	8.5	0.3	7.4	0.6	1.1 *
Connecticut	9.2	0.3	8.1	0.8	1.2 *
Delaware	8.6	0.7	8.5	1.7	0.1
District of Columbia	11.1	1.1	9.5	2.0	1.6
Florida	12.1	0.2	10.4	0.4	1.7 *
Georgia	11.2	0.3	9.8	0.5	1.4 *
Hawaii	7.1	0.6	7.4	1.3	-0.3
Idaho	9.6	0.6	8.5	1.3	1.1
Illinois	10.6	0.2	10.0	0.5	0.6 *
Indiana	11.0	0.3	10.0	0.7	0.9 *
Iowa	6.0	0.3	6.3	0.8	-0.4
Kansas	7.2	0.3	6.8	0.8	0.5
Kentucky	10.1	0.4	10.6	0.9	-0.5
Louisiana	8.4	0.4	7.1	0.7	1.3 *
Maine	7.2	0.5	8.1	1.3	-1.0
Maryland	8.0	0.3	7.1	0.6	0.9 *
Massachusetts	9.1	0.2	8.4	0.6	0.7 *
Michigan	14.7	0.3	13.3	0.6	1.4 *
Minnesota	8.2	0.3	7.8	0.6	0.3
Mississippi	10.7	0.5	9.2	1.0	1.5 *
Missouri	9.0	0.3	9.4	0.7	-0.4
Montana	7.9	0.8	7.1	1.5	0.9
Nebraska	6.0	0.4	4.6	0.8	1.5 *
Nevada	12.1	0.5	11.3	1.1	0.7
New Hampshire	7.8	0.5	6.4	1.1	1.4 *
New Jersey	9.8	0.3	9.1	0.5	0.6 *
New Mexico	9.0	0.7	7.6	1.1	1.4 *
New York	9.0	0.2	8.3	0.4	0.6 *
North Carolina	11.0	0.3	10.4	0.6	0.6
North Dakota	3.8	0.5	4.2	1.3	-0.4
Ohio	11.1	0.2	10.3	0.5	0.8 *
Oklahoma	6.8	0.3	6.2	0.7	0.6
Oregon	11.8	0.4	11.5	0.9	0.3
Pennsylvania	9.1	0.2	7.9	0.4	1.3 *
Rhode Island	9.6	0.7	11.2	1.7	-1.6
South Carolina	11.7	0.4	11.8	0.9	-0.1
South Dakota	5.2	0.7	5.0	1.3	0.2
Tennessee	11.1	0.3	10.8	0.7	0.3
Texas	8.2	0.2	7.5	0.3	0.6 *
Utah	7.8	0.4	7.3	0.9	0.5
Vermont	7.6	0.6	6.5	1.7	1.1
Virginia	7.4	0.2	6.6	0.5	0.8 *
Washington	9.5	0.3	9.0	0.6	0.6
West Virginia	7.7	0.5	8.0	1.2	-0.3
Wisconsin	8.2	0.3	8.4	0.6	-0.3
Wyoming	5.9	0.8	6.5	1.8	-0.7

\* Statistically significant difference at the 90-percent confidence level.

1. This number added to and subtracted from the estimate yields the 90-percent confidence interval around the estimate.

Source: U.S. Census Bureau, American Community Survey, 2009 and Current Population Survey, 2009, annual average.

Table derived from special tabulations. For more information on the ACS and CPS, see <http://www.census.gov/acs> and <http://www.bls.gov/cps>



**Table 8. Employment Population Ratio by State, 2007**  
(Civilian noninstitutionalized population)

	ACS		CPS/LAUS		ACS-CPS/LAUS	
	2007	90% Confidence Interval <sup>2</sup>	2007	90% Confidence Interval <sup>2</sup>	Difference 2007	
<b>United States<sup>1</sup></b>	61.6	61.6 - 61.7	63.0	62.8 - 63.2	-1.3	*
Alabama	57.0	56.6 - 57.5	59.2	57.5 - 60.9	-2.2	*
Alaska	65.3	64.5 - 66.2	66.2	64.5 - 67.9	-0.9	
Arizona	59.6	59.2 - 59.9	61.2	59.8 - 62.6	-1.6	*
Arkansas	57.4	56.8 - 57.9	59.8	58.6 - 61.0	-2.4	*
California	60.8	60.7 - 61.0	62.1	61.7 - 62.6	-1.3	*
Colorado	66.9	66.5 - 67.3	70.0	68.5 - 71.5	-3.1	*
Connecticut	64.9	64.5 - 65.3	65.4	64.2 - 66.5	-0.5	
Delaware	62.1	61.1 - 63.1	64.0	62.9 - 65.1	-1.9	*
District of Columbia	62.0	60.9 - 63.1	64.3	63.1 - 65.6	-2.3	*
Florida	58.3	58.0 - 58.5	61.2	60.3 - 62.0	-2.9	*
Georgia	62.2	62.0 - 62.5	64.9	64.0 - 65.9	-2.7	*
Hawaii	61.7	61.0 - 62.3	63.9	62.7 - 65.2	-2.2	*
Idaho	64.2	63.7 - 64.8	66.0	64.6 - 67.4	-1.8	*
Illinois	62.8	62.6 - 63.0	64.8	63.8 - 65.7	-2.0	*
Indiana	62.6	62.3 - 62.9	63.3	61.9 - 64.7	-0.7	
Iowa	66.9	66.5 - 67.3	69.1	68.0 - 70.2	-2.2	*
Kansas	66.5	66.1 - 67.0	67.5	66.4 - 68.6	-1.0	
Kentucky	58.1	57.7 - 58.5	59.1	57.7 - 60.4	-1.0	
Louisiana	58.3	57.8 - 58.7	59.3	57.6 - 60.9	-1.0	
Maine	62.4	61.9 - 63.0	63.4	62.2 - 64.7	-1.0	
Maryland	65.8	65.5 - 66.1	66.4	65.5 - 67.3	-0.6	
Massachusetts	64.2	63.9 - 64.5	63.8	62.7 - 64.9	0.4	
Michigan	58.1	57.9 - 58.4	59.7	58.7 - 60.7	-1.6	*
Minnesota	68.3	68.0 - 68.6	69.6	68.4 - 70.7	-1.3	*
Mississippi	55.3	54.7 - 55.9	56.7	55.1 - 58.3	-1.4	
Missouri	62.3	62.0 - 62.6	63.8	62.4 - 65.1	-1.5	*
Montana	62.8	62.0 - 63.5	64.8	63.4 - 66.1	-2.0	*
Nebraska	68.6	68.1 - 69.0	70.7	69.6 - 71.9	-2.1	*
Nevada	64.3	63.8 - 64.8	65.4	64.3 - 66.6	-1.1	
New Hampshire	67.2	66.6 - 67.9	68.4	67.4 - 69.4	-1.2	
New Jersey	63.0	62.7 - 63.2	63.4	62.4 - 64.3	-0.4	
New Mexico	58.9	58.3 - 59.6	60.9	59.9 - 61.9	-2.0	*
New York	60.0	59.8 - 60.2	59.9	59.3 - 60.6	0.1	
North Carolina	61.2	60.9 - 61.5	62.5	61.5 - 63.5	-1.3	*
North Dakota	68.3	67.4 - 69.1	71.2	69.5 - 72.8	-2.9	*
Ohio	61.3	61.1 - 61.6	63.6	62.7 - 64.4	-2.3	*
Oklahoma	60.9	60.4 - 61.3	60.7	59.4 - 62.0	0.2	
Oregon	61.4	60.9 - 61.9	62.1	61.1 - 63.1	-0.7	
Pennsylvania	60.6	60.4 - 60.8	61.5	60.7 - 62.4	-0.9	*
Rhode Island	62.4	61.6 - 63.2	65.4	64.3 - 66.6	-3.0	*
South Carolina	59.0	58.6 - 59.5	59.7	58.7 - 60.7	-0.7	
South Dakota	68.4	67.5 - 69.2	71.0	69.8 - 72.2	-2.6	*
Tennessee	59.8	59.5 - 60.1	60.9	59.7 - 62.1	-1.1	
Texas	62.6	62.4 - 62.7	62.9	62.1 - 63.6	-0.3	
Utah	67.5	67.0 - 68.0	70.3	68.9 - 71.8	-2.8	*
Vermont	66.9	66.1 - 67.7	67.8	66.6 - 68.9	-0.9	
Virginia	64.4	64.1 - 64.6	66.9	66.0 - 67.8	-2.5	*
Washington	62.6	62.2 - 62.9	64.8	63.8 - 65.8	-2.2	*
West Virginia	52.5	51.8 - 53.2	53.4	51.7 - 55.0	-0.9	
Wisconsin	65.9	65.7 - 66.2	67.4	66.1 - 68.7	-1.5	*
Wyoming	69.3	68.1 - 70.4	69.2	67.9 - 70.5	0.1	

<sup>1</sup> Estimates for the United States are from the Current Population Survey and estimates for the states are from the Local Area Unemployment Statistics program.

<sup>2</sup> Data are based on a sample and are subject to sampling variability. The confidence interval is a measure of an estimate's variability.

\* Indicates that the change or difference is statistically significant at the 90-percent confidence level.

Source: U.S. Census Bureau, 2007 American Community Survey; Bureau of Labor Statistics, 2007 Current Population Survey and 2007 Local Area Unemployment Statistics. For more information on the ACS, CPS, and LAUS, see <http://www.census.gov/acs/www/>, <http://www.bls.gov/cps/>, and <http://www.bls.gov/lau/>.

**Table 9. Employment Population Ratio by State, 2008**  
(Civilian noninstitutionalized population)

	ACS		CPS/LAUS		ACS-CPS/LAUS Difference 2008
	2008	90% Confidence Interval <sup>2</sup>	2008	90% Confidence Interval <sup>2</sup>	
<b>United States<sup>1</sup></b>	62.7	62.6 - 62.7	62.2	62.0 - 62.4	0.5 *
Alabama	58.0	57.6 - 58.4	57.2	55.5 - 58.9	0.8
Alaska	67.7	66.8 - 68.7	66.5	64.7 - 68.2	1.2
Arizona	60.4	60.1 - 60.8	60.7	59.3 - 62.1	-0.3
Arkansas	58.4	57.9 - 58.9	59.7	58.4 - 60.9	-1.3
California	61.3	61.2 - 61.5	61.1	60.7 - 61.6	0.2
Colorado	68.3	68.0 - 68.7	68.7	67.2 - 70.2	-0.4
Connecticut	65.6	65.1 - 66.1	64.9	63.7 - 66.0	0.7
Delaware	62.4	61.5 - 63.3	62.4	61.3 - 63.5	0.0
District of Columbia	63.6	62.4 - 64.8	64.2	63.0 - 65.4	-0.6
Florida	58.1	57.9 - 58.3	59.9	59.0 - 60.8	-1.8 *
Georgia	63.1	62.8 - 63.4	63.1	62.1 - 64.1	0.0
Hawaii	63.9	63.1 - 64.7	63.4	62.2 - 64.7	0.5
Idaho	64.0	63.3 - 64.6	63.5	62.1 - 64.9	0.5
Illinois	64.0	63.8 - 64.3	63.4	62.4 - 64.3	0.6
Indiana	63.4	63.1 - 63.7	62.4	61.0 - 63.8	1.0
Iowa	68.9	68.5 - 69.2	69.1	68.0 - 70.2	-0.2
Kansas	68.5	68.1 - 68.9	67.6	66.5 - 68.7	0.9
Kentucky	57.8	57.4 - 58.2	57.9	56.6 - 59.2	-0.1
Louisiana	59.7	59.3 - 60.2	59.4	57.8 - 61.0	0.3
Maine	62.8	62.0 - 63.5	63.0	61.8 - 64.2	-0.2
Maryland	67.7	67.3 - 68.0	65.8	64.9 - 66.7	1.9 *
Massachusetts	65.9	65.5 - 66.2	63.0	61.9 - 64.1	2.9 *
Michigan	58.8	58.5 - 59.0	58.1	57.1 - 59.0	0.7
Minnesota	69.8	69.5 - 70.0	68.6	67.4 - 69.8	1.2
Mississippi	57.3	56.8 - 57.8	55.9	54.3 - 57.4	1.4
Missouri	63.5	63.3 - 63.8	62.2	60.9 - 63.6	1.3
Montana	64.0	63.2 - 64.8	63.8	62.4 - 65.1	0.2
Nebraska	70.5	70.0 - 70.9	71.0	69.9 - 72.1	-0.5
Nevada	64.6	64.1 - 65.1	65.0	63.9 - 66.2	-0.4
New Hampshire	68.8	68.1 - 69.5	68.0	67.0 - 69.0	0.8
New Jersey	64.9	64.7 - 65.2	62.9	62.0 - 63.9	2.0 *
New Mexico	60.0	59.2 - 60.7	61.0	60.0 - 62.0	-1.0
New York	61.4	61.2 - 61.6	59.6	59.0 - 60.3	1.8 *
North Carolina	62.4	62.1 - 62.7	60.7	59.7 - 61.7	1.7 *
North Dakota	69.9	69.1 - 70.6	71.8	70.2 - 73.5	-1.9 *
Ohio	62.5	62.3 - 62.8	62.7	61.9 - 63.5	-0.2
Oklahoma	62.2	61.7 - 62.7	61.2	59.9 - 62.5	1.0
Oregon	61.7	61.3 - 62.1	61.5	60.5 - 62.5	0.2
Pennsylvania	61.6	61.4 - 61.8	61.7	60.9 - 62.5	-0.1
Rhode Island	62.5	61.7 - 63.3	62.8	61.6 - 63.9	-0.3
South Carolina	58.8	58.4 - 59.2	58.4	57.4 - 59.4	0.4
South Dakota	69.4	68.7 - 70.2	70.6	69.4 - 71.8	-1.2
Tennessee	60.8	60.5 - 61.1	59.2	58.0 - 60.4	1.6 *
Texas	64.3	64.1 - 64.5	62.5	61.7 - 63.2	1.8 *
Utah	67.7	67.2 - 68.1	68.7	67.2 - 70.2	-1.0
Vermont	67.4	66.5 - 68.2	67.2	66.0 - 68.4	0.2
Virginia	65.6	65.2 - 65.9	66.8	65.9 - 67.7	-1.2 *
Washington	63.5	63.2 - 63.8	64.7	63.7 - 65.7	-1.2 *
West Virginia	54.1	53.4 - 54.7	53.2	51.6 - 54.9	0.9
Wisconsin	67.6	67.4 - 67.9	66.9	65.6 - 68.3	0.7
Wyoming	69.2	68.1 - 70.2	69.2	67.8 - 70.5	0.0

<sup>1</sup> Estimates for the United States are from the Current Population Survey and estimates for the states are from the Local Area Unemployment Statistics program.

<sup>2</sup> Data are based on a sample and are subject to sampling variability. The confidence interval is a measure of an estimate's variability.

\* Indicates that the change or difference is statistically significant at the 90-percent confidence level.

Source: U.S. Census Bureau, 2008 American Community Survey; Bureau of Labor Statistics, 2008 Current Population Survey and 2008 Local Area Unemployment Statistics. For more information on the ACS, CPS, and LAUS, see <http://www.census.gov/acs/www/>, <http://www.bls.gov/cps/>, and <http://www.bls.gov/lau/>.

**Table 10. Employment Population Ratio by State, 2009**  
(Civilian noninstitutionalized population)

	ACS		CPS/LAUS		ACS-CPS/LAUS	
	2009	90% Confidence Interval <sup>2</sup>	2009	90% Confidence Interval <sup>2</sup>	Difference 2009	
<b>United States<sup>1</sup></b>	59.7	59.6 - 59.7	59.3	59.1 - 59.5	0.4	*
Alabama	54.9	54.5 - 55.3	52.4	50.7 - 54.1	2.5	*
Alaska	64.6	63.5 - 65.7	64.5	62.8 - 66.3	0.1	
Arizona	56.4	56.0 - 56.9	57.7	56.3 - 59.2	-1.3	
Arkansas	56.5	55.9 - 57.2	57.6	56.4 - 58.8	-1.1	
California	58.7	58.5 - 58.8	57.7	57.2 - 58.1	1.0	*
Colorado	64.7	64.3 - 65.0	64.9	63.4 - 66.4	-0.2	
Connecticut	63.4	63.0 - 63.8	63.1	61.9 - 64.3	0.3	
Delaware	60.8	60.0 - 61.7	58.2	57.1 - 59.3	2.6	*
District of Columbia	60.2	59.1 - 61.2	61.1	59.9 - 62.3	-0.9	
Florida	54.8	54.5 - 55.0	56.4	55.5 - 57.3	-1.6	*
Georgia	59.0	58.6 - 59.4	59.1	58.1 - 60.0	-0.1	
Hawaii	62.4	61.7 - 63.0	59.9	58.7 - 61.2	2.5	*
Idaho	59.7	59.1 - 60.3	60.1	58.7 - 61.6	-0.4	
Illinois	60.9	60.7 - 61.0	60.1	59.1 - 61.0	0.8	
Indiana	59.8	59.4 - 60.2	58.3	56.9 - 59.8	1.5	
Iowa	66.6	66.2 - 67.0	67.5	66.5 - 68.6	-0.9	
Kansas	64.7	64.3 - 65.2	66.6	65.4 - 67.7	-1.9	*
Kentucky	55.7	55.2 - 56.1	56.0	54.6 - 57.3	-0.3	
Louisiana	58.7	58.2 - 59.1	56.7	55.1 - 58.3	2.0	
Maine	61.1	60.4 - 61.7	60.8	59.5 - 62.0	0.3	
Maryland	65.1	64.7 - 65.4	63.0	62.1 - 63.9	2.1	*
Massachusetts	63.1	62.8 - 63.4	60.7	59.6 - 61.8	2.4	*
Michigan	54.5	54.2 - 54.8	54.3	53.3 - 55.3	0.2	
Minnesota	66.3	66.0 - 66.6	66.9	65.8 - 68.1	-0.6	
Mississippi	54.4	53.8 - 54.9	53.1	51.5 - 54.6	1.3	
Missouri	60.5	60.2 - 60.9	59.7	58.4 - 61.1	0.8	
Montana	60.8	60.0 - 61.5	61.1	59.8 - 62.5	-0.3	
Nebraska	68.2	67.7 - 68.8	68.9	67.7 - 70.0	-0.7	
Nevada	60.7	60.1 - 61.4	60.4	59.2 - 61.6	0.3	
New Hampshire	65.7	65.0 - 66.4	65.8	64.8 - 66.8	-0.1	
New Jersey	61.8	61.5 - 62.1	60.7	59.8 - 61.7	1.1	
New Mexico	57.3	56.6 - 58.1	58.3	57.3 - 59.3	-1.0	
New York	59.3	59.1 - 59.5	57.8	57.1 - 58.4	1.5	*
North Carolina	58.2	57.9 - 58.5	57.0	55.9 - 58.0	1.2	
North Dakota	68.4	67.6 - 69.1	69.4	67.7 - 71.1	-1.0	
Ohio	58.7	58.5 - 59.0	59.7	58.9 - 60.6	-1.0	
Oklahoma	59.8	59.3 - 60.3	59.7	58.4 - 61.1	0.1	
Oregon	57.9	57.5 - 58.3	58.1	57.1 - 59.1	-0.2	
Pennsylvania	59.0	58.8 - 59.3	59.3	58.4 - 60.1	-0.3	
Rhode Island	61.5	60.7 - 62.4	60.1	59.0 - 61.3	1.4	
South Carolina	56.1	55.7 - 56.5	55.0	54.0 - 56.0	1.1	
South Dakota	67.1	66.3 - 67.8	68.9	67.7 - 70.1	-1.8	
Tennessee	56.9	56.5 - 57.2	55.5	54.3 - 56.7	1.4	
Texas	61.9	61.7 - 62.1	60.9	60.2 - 61.6	1.0	*
Utah	64.6	64.2 - 65.0	64.6	63.1 - 66.2	0.0	
Vermont	64.2	63.3 - 65.0	66.2	65.0 - 67.4	-2.0	
Virginia	62.9	62.6 - 63.2	64.8	64.0 - 65.7	-1.9	*
Washington	60.3	59.9 - 60.6	62.2	61.2 - 63.2	-1.9	*
West Virginia	52.4	51.9 - 52.9	50.5	48.9 - 52.2	1.9	
Wisconsin	64.8	64.4 - 65.1	63.9	62.5 - 65.2	0.9	
Wyoming	66.7	65.7 - 67.7	66.0	64.6 - 67.3	0.7	

<sup>1</sup> Estimates for the United States are from the Current Population Survey and estimates for the states are from the Local Area Unemployment Statistics program.

<sup>2</sup> Data are based on a sample and are subject to sampling variability. The confidence interval is a measure of an estimate's variability.

\* Indicates that the change or difference is statistically significant at the 90-percent confidence level.

Source: U.S. Census Bureau, 2009 American Community Survey; Bureau of Labor Statistics, 2009 Current Population Survey and 2009 Local Area Unemployment Statistics. For more information on the ACS, CPS, and LAUS, see <http://www.census.gov/acs/www/>, <http://www.bls.gov/cps/>, and <http://www.bls.gov/laus/>.

**Table 11. Unemployment Rate by State, 2007**  
(Civilian noninstitutionalized population)

	ACS		CPS/LAUS		ACS-CPS/LAUS	
	2007	90% Confidence Interval <sup>2</sup>	2007	90% Confidence Interval <sup>2</sup>	Difference 2007	
<b>United States<sup>1</sup></b>	6.3	6.3 - 6.4	4.6	4.6 - 4.7	1.7	*
Alabama	6.7	6.4 - 7.0	3.5	2.8 - 4.2	3.2	*
Alaska	8.8	8.1 - 9.4	6.2	5.5 - 6.8	2.6	*
Arizona	5.8	5.5 - 6.0	3.8	3.3 - 4.3	2.0	*
Arkansas	7.2	6.8 - 7.5	5.4	4.8 - 6.0	1.8	*
California	6.6	6.5 - 6.7	5.4	5.2 - 5.6	1.2	*
Colorado	5.5	5.3 - 5.7	3.8	3.5 - 4.2	1.7	*
Connecticut	6.0	5.7 - 6.3	4.6	4.2 - 5.0	1.4	*
Delaware	5.6	5.0 - 6.2	3.4	3.0 - 3.8	2.2	*
District of Columbia	8.1	7.2 - 8.9	5.7	5.1 - 6.2	2.4	*
Florida	6.2	6.0 - 6.3	4.0	3.8 - 4.3	2.2	*
Georgia	7.0	6.8 - 7.3	4.4	4.0 - 4.8	2.6	*
Hawaii	4.5	4.1 - 5.0	2.6	2.3 - 3.0	1.9	*
Idaho	5.1	4.7 - 5.4	2.7	2.3 - 3.2	2.4	*
Illinois	7.2	7.0 - 7.3	5.0	4.6 - 5.4	2.2	*
Indiana	6.6	6.4 - 6.8	4.5	4.0 - 5.0	2.1	*
Iowa	4.8	4.5 - 5.1	3.8	3.4 - 4.2	1.0	*
Kansas	5.1	4.8 - 5.4	4.1	3.7 - 4.5	1.0	*
Kentucky	6.6	6.3 - 6.9	5.5	4.9 - 6.0	1.1	*
Louisiana	6.4	6.1 - 6.8	3.8	3.2 - 4.5	2.6	*
Maine	6.0	5.6 - 6.5	4.7	4.3 - 5.2	1.3	*
Maryland	5.5	5.3 - 5.7	3.6	3.3 - 3.9	1.9	*
Massachusetts	6.1	5.8 - 6.4	4.5	4.0 - 4.9	1.6	*
Michigan	9.6	9.4 - 9.8	7.2	6.7 - 7.7	2.4	*
Minnesota	5.4	5.2 - 5.6	4.6	4.2 - 4.9	0.8	*
Mississippi	9.3	8.8 - 9.7	6.3	5.6 - 7.1	3.0	*
Missouri	6.3	6.1 - 6.6	5.0	4.5 - 5.6	1.3	*
Montana	5.2	4.6 - 5.8	3.1	2.6 - 3.7	2.1	*
Nebraska	4.6	4.3 - 5.0	3.0	2.7 - 3.4	1.6	*
Nevada	5.6	5.2 - 6.0	4.8	4.4 - 5.2	0.8	*
New Hampshire	5.1	4.6 - 5.5	3.6	3.3 - 3.8	1.5	*
New Jersey	5.9	5.7 - 6.1	4.2	3.9 - 4.6	1.7	*
New Mexico	5.6	5.2 - 6.1	3.5	3.0 - 4.0	2.1	*
New York	6.2	6.1 - 6.3	4.5	4.3 - 4.8	1.7	*
North Carolina	6.9	6.6 - 7.1	4.7	4.3 - 5.0	2.2	*
North Dakota	3.5	3.0 - 3.9	3.2	2.8 - 3.6	0.3	
Ohio	7.2	7.0 - 7.3	5.6	5.2 - 6.1	1.6	*
Oklahoma	5.4	5.1 - 5.6	4.3	3.8 - 4.8	1.1	*
Oregon	6.5	6.2 - 6.8	5.2	4.7 - 5.7	1.3	*
Pennsylvania	5.9	5.8 - 6.1	4.4	4.0 - 4.7	1.5	*
Rhode Island	6.3	5.6 - 7.0	5.0	4.6 - 5.5	1.3	*
South Carolina	6.9	6.6 - 7.2	5.9	5.3 - 6.5	1.0	*
South Dakota	4.1	3.7 - 4.6	3.0	2.7 - 3.3	1.1	*
Tennessee	6.9	6.7 - 7.2	4.7	4.2 - 5.2	2.2	*
Texas	5.9	5.7 - 6.0	4.3	4.1 - 4.6	1.6	*
Utah	3.8	3.6 - 4.1	2.7	2.3 - 3.0	1.1	*
Vermont	5.1	4.6 - 5.6	3.9	3.5 - 4.3	1.2	*
Virginia	4.8	4.7 - 5.0	3.0	2.7 - 3.4	1.8	*
Washington	6.0	5.7 - 6.3	4.5	4.1 - 5.0	1.5	*
West Virginia	6.2	5.7 - 6.7	4.6	3.9 - 5.2	1.6	*
Wisconsin	5.7	5.6 - 5.9	4.9	4.5 - 5.3	0.8	*
Wyoming	3.7	3.2 - 4.2	3.0	2.6 - 3.4	0.7	*

<sup>1</sup> Estimates for the United States are from the Current Population Survey and estimates for the states are from the Local Area Unemployment Statistics program.

<sup>2</sup> Data are based on a sample and are subject to sampling variability. The confidence interval is a measure of an estimate's variability.

\* Indicates that the change or difference is statistically significant at the 90-percent confidence level.

Source: U.S. Census Bureau, 2007 American Community Survey; Bureau of Labor Statistics, 2007 Current Population Survey and 2007 Local Area Unemployment Statistics. For more information on the ACS, CPS, and LAUS, see <http://www.census.gov/acs/www/>, <http://www.bls.gov/cps/>, and <http://www.bls.gov/lau/>.

**Table 12. Unemployment Rate by State, 2008**  
(Civilian noninstitutionalized population)

	ACS-CPS/LAUS				
	2008	90% Confidence Interval <sup>2</sup>	2008	90% Confidence Interval <sup>2</sup>	Difference 2008
<b>United States<sup>1</sup></b>	6.4	6.3 - 6.4	5.8	5.7 - 5.9	0.6 *
Alabama	7.0	6.6 - 7.3	5.0	4.2 - 5.9	2.0 *
Alaska	7.7	7.0 - 8.4	6.7	6.0 - 7.4	1.0 *
Arizona	6.1	5.8 - 6.3	5.5	4.9 - 6.1	0.6 *
Arkansas	6.6	6.2 - 7.0	5.1	4.5 - 5.7	1.5 *
California	7.5	7.4 - 7.6	7.2	7.0 - 7.5	0.3 *
Colorado	4.9	4.6 - 5.1	4.9	4.5 - 5.3	0.0
Connecticut	6.4	6.1 - 6.7	5.7	5.3 - 6.1	0.7 *
Delaware	6.6	5.9 - 7.3	4.8	4.3 - 5.2	1.8 *
District of Columbia	7.8	6.8 - 8.7	7.0	6.4 - 7.6	0.8 *
Florida	7.5	7.3 - 7.7	6.2	5.9 - 6.5	1.3 *
Georgia	7.0	6.8 - 7.3	6.2	5.8 - 6.7	0.8 *
Hawaii	4.1	3.6 - 4.5	3.9	3.5 - 4.4	0.2
Idaho	5.5	5.0 - 5.9	4.9	4.2 - 5.5	0.6
Illinois	6.9	6.7 - 7.1	6.5	6.0 - 6.9	0.4 *
Indiana	6.9	6.7 - 7.1	5.9	5.3 - 6.5	1.0 *
Iowa	3.9	3.7 - 4.1	4.1	3.7 - 4.5	-0.2
Kansas	4.4	4.2 - 4.7	4.4	4.0 - 4.8	0.0
Kentucky	6.9	6.6 - 7.1	6.4	5.8 - 7.1	0.5
Louisiana	6.0	5.7 - 6.4	4.6	3.9 - 5.3	1.4 *
Maine	5.9	5.5 - 6.3	5.4	4.9 - 5.9	0.5 *
Maryland	5.4	5.1 - 5.6	4.4	4.0 - 4.7	1.0 *
Massachusetts	6.0	5.7 - 6.3	5.3	4.8 - 5.8	0.7 *
Michigan	9.5	9.3 - 9.7	8.4	7.9 - 9.0	1.1 *
Minnesota	4.9	4.7 - 5.1	5.4	5.1 - 5.8	-0.5 *
Mississippi	7.8	7.3 - 8.2	6.9	6.1 - 7.7	0.9
Missouri	6.1	5.9 - 6.4	6.1	5.5 - 6.7	0.0
Montana	4.7	4.2 - 5.2	4.5	3.9 - 5.1	0.2
Nebraska	4.0	3.7 - 4.3	3.3	3.0 - 3.7	0.7 *
Nevada	7.3	6.9 - 7.8	6.7	6.1 - 7.2	0.6 *
New Hampshire	4.5	4.1 - 4.9	3.8	3.5 - 4.1	0.7 *
New Jersey	5.9	5.8 - 6.1	5.5	5.0 - 5.9	0.4 *
New Mexico	6.0	5.6 - 6.4	4.2	3.6 - 4.7	1.8 *
New York	6.3	6.1 - 6.4	5.4	5.2 - 5.7	0.9 *
North Carolina	6.8	6.5 - 7.0	6.3	5.9 - 6.7	0.5 *
North Dakota	3.2	2.7 - 3.6	3.2	2.8 - 3.5	0.0
Ohio	7.0	6.8 - 7.2	6.5	6.0 - 7.0	0.5 *
Oklahoma	4.6	4.3 - 4.9	3.8	3.4 - 4.3	0.8 *
Oregon	6.7	6.4 - 7.0	6.4	5.8 - 6.9	0.3
Pennsylvania	5.7	5.6 - 5.9	5.4	5.0 - 5.8	0.3
Rhode Island	7.5	6.8 - 8.2	7.8	7.2 - 8.4	-0.3
South Carolina	7.7	7.4 - 8.1	6.9	6.3 - 7.6	0.8 *
South Dakota	3.7	3.2 - 4.2	3.0	2.7 - 3.3	0.7 *
Tennessee	6.9	6.7 - 7.2	6.4	5.8 - 7.0	0.5 *
Texas	5.2	5.1 - 5.4	4.9	4.6 - 5.2	0.3 *
Utah	4.0	3.7 - 4.3	3.4	3.0 - 3.8	0.6 *
Vermont	4.9	4.5 - 5.4	4.8	4.3 - 5.2	0.1
Virginia	4.9	4.7 - 5.1	4.0	3.6 - 4.4	0.9 *
Washington	5.6	5.4 - 5.9	5.3	4.9 - 5.8	0.3
West Virginia	5.7	5.3 - 6.1	4.3	3.6 - 4.9	1.4 *
Wisconsin	5.1	5.0 - 5.3	4.7	4.3 - 5.1	0.4
Wyoming	3.3	2.8 - 3.9	3.1	2.7 - 3.5	0.2

<sup>1</sup> Estimates for the United States are from the Current Population Survey and estimates for the states are from the Local Area Unemployment Statistics program.

<sup>2</sup> Data are based on a sample and are subject to sampling variability. The confidence interval is a measure of an estimate's variability.

\* Indicates that the change or difference is statistically significant at the 90-percent confidence level.

Source: U.S. Census Bureau, 2008 American Community Survey; Bureau of Labor Statistics, 2008 Current Population Survey and 2008 Local Area Unemployment Statistics. For more information on the ACS, CPS, and LAUS, see <http://www.census.gov/acs/www/>, <http://www.bls.gov/cps/>, and <http://www.bls.gov/lau/>.

**Table 13. Unemployment Rate by State, 2009**  
(Civilian noninstitutionalized population)

	ACS		LAUS		ACS-CPS/LAUS Difference 2009
	2009	90% Confidence Interval <sup>2</sup>	2009	90% Confidence Interval <sup>2</sup>	
<b>United States<sup>1</sup></b>	9.9	9.9 - 9.9	9.3	9.2 - 9.3	0.6 *
Alabama	11.1	10.7 - 11.5	10.1	8.9 - 11.2	1.0
Alaska	9.5	8.7 - 10.2	8.0	7.2 - 8.7	1.5
Arizona	10.7	10.3 - 11.0	9.1	8.3 - 9.8	1.6 *
Arkansas	9.1	8.7 - 9.6	7.3	6.5 - 8.0	1.8 *
California	11.3	11.1 - 11.4	11.4	11.1 - 11.8	-0.1
Colorado	8.5	8.2 - 8.8	7.7	7.2 - 8.2	0.8
Connecticut	9.2	8.9 - 9.5	8.2	7.7 - 8.8	1.0 *
Delaware	8.6	7.9 - 9.3	8.1	7.5 - 8.7	0.5
District of Columbia	11.1	10.0 - 12.2	10.2	9.5 - 11.0	0.9
Florida	12.1	11.8 - 12.3	10.5	10.1 - 10.9	1.6 *
Georgia	11.2	10.9 - 11.5	9.6	9.0 - 10.2	1.6 *
Hawaii	7.1	6.6 - 7.7	6.8	6.2 - 7.3	0.3
Idaho	9.6	9.1 - 10.2	8.0	7.2 - 8.8	1.6 *
Illinois	10.6	10.4 - 10.8	10.1	9.5 - 10.6	0.5
Indiana	11.0	10.6 - 11.3	10.1	9.3 - 10.8	0.9
Iowa	6.0	5.7 - 6.3	6.0	5.5 - 6.4	0.0
Kansas	7.2	6.9 - 7.6	6.7	6.2 - 7.2	0.5
Kentucky	10.1	9.7 - 10.5	10.5	9.7 - 11.2	-0.4
Louisiana	8.4	8.0 - 8.7	6.8	6.0 - 7.7	1.6 *
Maine	7.2	6.7 - 7.6	8.0	7.5 - 8.6	-0.8
Maryland	8.0	7.7 - 8.3	7.0	6.6 - 7.4	1.0 *
Massachusetts	9.1	8.8 - 9.3	8.4	7.8 - 9.0	0.7
Michigan	14.7	14.4 - 15.0	13.6	12.9 - 14.3	1.1 *
Minnesota	8.2	7.9 - 8.4	8.0	7.5 - 8.4	0.2
Mississippi	10.7	10.2 - 11.2	9.6	8.7 - 10.4	1.1
Missouri	9.0	8.8 - 9.3	9.3	8.6 - 10.0	-0.3
Montana	7.9	7.2 - 8.7	6.2	5.5 - 6.9	1.7 *
Nebraska	6.0	5.6 - 6.5	4.6	4.2 - 5.0	1.4 *
Nevada	12.1	11.5 - 12.6	11.8	11.0 - 12.5	0.3
New Hampshire	7.8	7.3 - 8.4	6.3	5.9 - 6.7	1.5 *
New Jersey	9.8	9.5 - 10.0	9.2	8.7 - 9.8	0.6
New Mexico	9.0	8.4 - 9.7	7.2	6.4 - 7.9	1.8 *
New York	9.0	8.8 - 9.1	8.4	8.0 - 8.7	0.6 *
North Carolina	11.0	10.7 - 11.3	10.6	10.1 - 11.2	0.4
North Dakota	3.8	3.3 - 4.3	4.3	3.9 - 4.8	-0.5 *
Ohio	11.1	10.9 - 11.3	10.2	9.7 - 10.8	0.9 *
Oklahoma	6.8	6.5 - 7.1	6.4	5.8 - 7.0	0.4
Oregon	11.8	11.4 - 12.2	11.1	10.4 - 11.7	0.7
Pennsylvania	9.1	8.9 - 9.4	8.1	7.7 - 8.5	1.0 *
Rhode Island	9.6	8.9 - 10.4	11.2	10.5 - 11.9	-1.6 *
South Carolina	11.7	11.4 - 12.1	11.7	10.9 - 12.5	0.0
South Dakota	5.2	4.6 - 5.9	4.8	4.4 - 5.1	0.4
Tennessee	11.1	10.8 - 11.4	10.5	9.8 - 11.2	0.6
Texas	8.2	8.0 - 8.3	7.6	7.3 - 8.0	0.6
Utah	7.8	7.4 - 8.3	6.6	6.0 - 7.1	1.2 *
Vermont	7.6	7.1 - 8.2	6.9	6.4 - 7.4	0.7
Virginia	7.4	7.2 - 7.6	6.7	6.2 - 7.1	0.7 *
Washington	9.5	9.2 - 9.9	8.9	8.3 - 9.5	0.6
West Virginia	7.7	7.2 - 8.2	7.9	7.1 - 8.8	-0.2
Wisconsin	8.2	7.9 - 8.4	8.5	8.0 - 9.0	-0.3
Wyoming	5.9	5.0 - 6.7	6.4	5.8 - 6.9	-0.5

<sup>1</sup> Estimates for the United States are from the Current Population Survey and estimates for the states are from the Local Area Unemployment Statistics program.

<sup>2</sup> Data are based on a sample and are subject to sampling variability. The confidence interval is a measure of an estimate's variability.

\* Indicates that the change or difference is statistically significant at the 90-percent confidence level.

Source: U.S. Census Bureau, 2009 American Community Survey; Bureau of Labor Statistics, 2009 Current Population Survey and 2009 Local Area Unemployment Statistics. For more information on the ACS, CPS, and LAUS, see <http://www.census.gov/acs/www/>, <http://www.bls.gov/cps/>, and <http://www.bls.gov/lau/>.